



DEPARTMENT OF TRANSPORTATION

## National Highway Traffic Safety Administration

[Docket No. NHTSA-2021-0085]

### Agency Information Collection Activities; Notice and Request for Comment; Driver Alcohol Detection System for Safety Field Operational Test

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Notice and request for public comment on an extension of a currently approved information collection.

**SUMMARY:** The National Highway Traffic Safety Administration (NHTSA) invites public comments about our intention to request approval from the Office of Management and Budget (OMB) for an extension of a currently approved information collection. Before a Federal agency may collect certain information from the public, it must receive approval from OMB. Under procedures established by the Paperwork Reduction Act of 1995, before seeking OMB approval, Federal agencies must solicit public comment on proposed collections of information, including extensions and reinstatements of previously approved collections. This document describes a collection of information for which NHTSA intends to seek OMB approval to allow NHTSA to continue to conduct research on the development of a driver alcohol detection system. NHTSA is seeking an extension of the information collection, titled “Driver Alcohol Detection System for Safety Field Operational Test” (OMB Control Number 2127-0734), which is currently approved through March 31, 2022. The extension is necessary to complete data collection that was delayed due to COVID-19 restrictions. The burden hour and cost calculations have been adjusted to reflect only the remaining data collection, adjustments for recruitment based on current experience, and adjustments in participation based on current experience.

**DATES:** Comments must be submitted on or before [INSERT DATE 60 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may submit comments identified by the Docket No. NHTSA-2021-0085

through any of the following methods:

- Electronic submissions: Go to the Federal eRulemaking Portal at <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail or Hand Delivery: Docket Management, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Room W12-140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except on Federal holidays. To be sure someone is there to help you, please call (202) 366-9322 before coming.

*Instructions:* All submissions must include the agency name and docket number for this notice. Note that all comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. Please see the Privacy Act heading below.

*Privacy Act:* Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the *Federal Register* published on April 11, 2000 (65 FR 19477-78) or you may visit <https://www.transportation.gov/privacy>.

*Docket:* For access to the docket to read background documents or comments received, go to <http://www.regulations.gov> or the street address listed above. Follow the online instructions for accessing the dockets via internet.

**FOR FURTHER INFORMATION CONTACT:** For additional information or access to background documents, contact Eric Traube, Vehicle Safety Research, Human Factors/Engineering Integration Division (NSR-310), (202) 366-5673, National Highway Traffic Safety Administration, W46-424, U.S. Department of Transportation, 1200 New Jersey Avenue,

SE, Washington, DC 20590. Please identify the relevant collection of information by referring to its OMB Control Number.

**SUPPLEMENTARY INFORMATION:** Under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.), before an agency submits a proposed collection of information to OMB for approval, it must first publish a document in the Federal Register providing a 60-day comment period and otherwise consult with members of the public and affected agencies concerning each proposed collection of information. The OMB has promulgated regulations describing what must be included in such a document. Under OMB's regulation (at 5 CFR 1320.8(d)), an agency must ask for public comment on the following: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) how to enhance the quality, utility, and clarity of the information to be collected; and (d) how to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses. In compliance with these requirements, NHTSA asks for public comments on the following proposed collection of information for which the agency is seeking approval from OMB.

**Title:** Driver Alcohol Detection System for Safety Field Operational Test

**OMB Control Number:** 2127-0734

**Form Number(s):** None

**Type of Request:** Extension of a currently approved information collection

**Type of Review Requested:** Regular

**Requested Expiration Date of Approval:** 3 years from date of approval

**Summary of the Collection of Information:**

NHTSA and the Automotive Coalition for Traffic Safety (ACTS) began research in February 2008 to try to find potential in-vehicle approaches to the problem of alcohol-impaired driving. Members of ACTS comprise motor vehicle manufacturers representing approximately 99 percent of light vehicle sales in the U.S. This cooperative research partnership, known as the Driver Alcohol Detection System for Safety (DADSS) Program, is exploring the feasibility, the potential benefits of, and the public policy challenges associated with a more widespread use of non-invasive technology to prevent alcohol-impaired driving. The 2008 cooperative agreement between NHTSA and ACTS for Phases I and II outlined a program of research to assess the state of detection technologies that are capable of measuring blood alcohol concentration (BAC) or Breath Alcohol Concentration (BrAC). The 2008 cooperative agreement and a subsequent 2013 cooperative agreement support the creation and testing of prototypes and subsequent hardware that could be installed in vehicles. As part of this research program, and pursuant to the 2013 cooperative agreement, NHTSA and ACTS developed both breath- and touch-based sensors to evaluate the potential implementation and integration of both breath-and touch-based sensor technologies. The sensors are to be integrated into a vehicle in a manner that does not significantly alter the appearance of the vehicle interior. Further research is needed to evaluate the potential implementation and integration of both breath- and touch-based sensor technologies.

The purpose of this information collection is to collect data needed to evaluate the functionality of the touch- and breath- based sensors in varying operating conditions by having study participants provide breath and touch samples in DADSS research vehicles equipped with the sensors. Although the sensors will undergo significant laboratory testing, it is necessary to evaluate their function in extreme real-world environmental conditions to ensure that they will be operational for the harshest conditions that the sensors will encounter.

The sensor-equipped research vehicles are used to gather data regarding sensor validity and reliability, as well as assess the real-world use of the sensors with human participants in

varying environmental conditions, such as weather conditions, road conditions, temperatures, altitudes, air conditioner or heater status, window up or down, etc. These are the first vehicles ever to be equipped with systems designed to be unobtrusive that can measure driver alcohol levels. As such, it represents the first opportunity for researchers to gain an understanding of the use of the sensors in the operational context for which they were designed. Data collected from the study's Field Operational Test (FOT or DADSS FOT) will be used to further refine the DADSS Performance Specifications and evaluate subsystem/sensor performance.

The collection of information consists of: (1) an eligibility interview with COVID screening questions and COVID test, (2) a multi-day FOT of DADSS sensors, and (3) a post-test-day questionnaire. NHTSA is currently collecting information for the study and the data collection is ongoing. Extension of the study is necessary due to COVID-related delays which paused data collection for a period of time and during development of new COVID precautions.

### **Description of the Need for the Information and Proposed Use of the Information:**

A key to the establishment of effective in-vehicle alcohol detection systems is an understanding of real-world use of the technology. The DADSS FOT will provide a greater understanding of the performance of both breath- and touch-based sensors with actual drivers using the technology under varying environmental conditions.

The objectives of the DADSS FOT are to:

- Determine the effectiveness, as compared to the standardized breathalyzer, of the DADSS sensors in a real-world driving environment.
- Analyze DADSS touch- and breath-based sensors in real-world driving scenarios.
- Obtain technical data to further refine the DADSS Performance Specifications for the DADSS System that will ultimately be used for vehicle design and development.

The data collected during the DADSS FOT is for the purpose of validating the DADSS prototype sensors under varying environmental conditions. The use of human participants in the

DADSS FOT is for the operation of the vehicle and to have participants testing the sensors with and without alcohol in their systems so that the sensors' performance may be evaluated.

**Affected Public:** General public

**Estimated Number of Respondents:** 2,787

When NHTSA sought approval for the currently approved information collection, it described its plan for collecting data from 480 unique respondents. In order to recruit 480 participants who would complete the field operational test, NHTSA estimated that 600 respondents would need to complete the initial eligibility screening (a 75% recruitment rate). Based on experience, NHTSA has found that the actual recruitment rate is much lower than anticipated. As of August 31, 2021, 62 participants had been successfully recruited and participated in the FOT. Successful recruitment involved a screening of 420 individuals, for a recruitment rate of 15 percent. Since NHTSA needs to recruit 418 more participants, NHTSA estimates that the research team would need to screen 2,787 individuals.

**Frequency:** Varies

There are four different components to this information collection and the frequency for response varies across the components: the initial eligibility screening is conducted one-time; the full orientation is conducted one-time; the health screening is conducted each time that an individual participates in the FOT; and the FOT is conducted as many times as the individual wishes, up to 60 times.

**Estimated Total Annual Burden Hours:** 3,249

When NHTSA originally obtained clearance for this ICR, the agency did not expect to need to renew the collection. Instead, it was expected that the data collection would have been completed within the three-year clearance period. However, COVID-19 delayed the research effort, necessitating this request for extension. Accordingly, NHTSA is requesting an extension of this currently approved information collection for the portion of the planned data collection that still needs to be completed. As of August 31, 2021, collection is complete for 62 participants

of the necessary 480 participants. Therefore, NHTSA is requesting approval for the collection of information from 418 remaining participants and individuals screened in order to recruit the 418 participants. In estimating the burden of this collection, NHTSA has made adjustments, based on its experience with recruitment and data collection under the current collection, to its estimates for numbers of screenings, duration associated with information collection, and frequency of data collection of various phases of the study. NHTSA has also added new COVID-19 screening questions and a COVID-19 test requirement for the safety of both researchers and study participants. These new COVID-19 safety measures will be carried out in accordance with CDC guidelines and the data from the screening questions and tests will not be retained nor used for analytic purposes.

When NHTSA originally sought approval for this research study, it estimated that each initial eligibility/demographic interview would take approximately 15 minutes. With experience, NHTSA is now revising the estimate to be 30 minutes. NHTSA is also revising its burden estimates to include time for health screenings each time a respondent participates in the FOT after their first day. On the first day, participants will go through a full orientation, which is expected to last 1 hour and includes both a health screening and in-vehicle instruction. NHTSA estimates that the health screening portion takes approximately 30 minutes.

NHTSA originally estimated burdens associated with this collection assuming that each participant would complete the FOT 60 times. This was based on the maximum amount of participation. However, based on the experience of the data collection through August 31, 2021, participants are, on average, completing the FOT 2.13 times. Of the 62 participants who have completed the FOT thus far, 27 participated only once. The remaining 35 participated an average of 3 times each. Using this average, NHTSA estimates that the remaining 418 participants will complete a total of 890 operational tests.

Based on experience, NHTSA has also revised the estimated burden hours for the FOT. NHTSA now estimates the average duration of the pre-drive, drive, and post-drive recovery to be five hours (this estimate does not include orientation time, which is estimated separately).

NHTSA has also revised estimates to include the time for test-day questions in the burden estimate for FOT. These questions were counted separately in the initial ICR. However, the question responses are collected during the post-drive recovery time and included in the average time for participants in the FOT portion of the study.

NHTSA estimates the total burden for the remaining data collection to be 6,498 hours. The research team expects the data collection to take place over 24 months, for an average of 3,249 hours per year. This is longer than initially estimated due to observed difficulty in recruitment.

NHTSA estimates the opportunity cost associated with this information collection using the median hourly wage for the Southwest Virginia nonmetropolitan area of \$15.34 per hour for all occupations,<sup>1</sup> resulting in a total opportunity cost of \$99,679.32 and an annual opportunity cost of \$49,839.66.

Table 1 provides a summary of the remaining burden hours for this information collection.

**Table 1. Estimated Burden Hours and Associated Opportunity Costs**

<b>Instrument</b>	<b>Number of Responses</b>	<b>Number of Respondents</b>	<b>Duration</b>	<b>Estimated Burden Hours</b>	<b>Cost per hour</b>	<b>Estimated burden hour cost</b>
Eligibility/Demographic Interview	2,787	2,787	30 min (0.5 hrs)	1,393.5 hrs	\$15.34	\$21,376.29
Full Orientation	418	418	1 hour	418 hours	\$15.34	\$8,151.00
Health Screening Only	468	234	30 min (0.5 hrs)	234 hours	\$15.34	\$4,563.00
Field Operational Test	890	418	5 hours	4,452 hours	\$15.34	\$86,814.00
Total (covering a 24-month period)				6,497.5 hours <b>(6,498 hours)</b>		\$99,679.32
<b>Estimated Annual Burden</b>				<b>3,249 hours</b>		<b>\$49,839.66</b>

<sup>1</sup>Occupational Employment and Wage Statistics. May 2020 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates-Southwest Virginia nonmetropolitan area. U.S. Bureau of Labor Statistics. [https://www.bls.gov/oes/2020/may/oes\\_5100001.htm](https://www.bls.gov/oes/2020/may/oes_5100001.htm). Last Accessed 12/27/21.



**Estimated Total Annual Burden Cost: \$0**

NHTSA estimates that there are no additional costs to respondents beyond those associated with opportunity cost. To offset these costs, NHTSA is paying respondents who participate in the FOT \$19.50 per hour.

**PUBLIC COMMENTS INVITED:** You are asked to comment on any aspects of this information collection, including (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (b) the accuracy of the Department's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

**AUTHORITY:** The Paperwork Reduction Act of 1995; 44 U.S.C. chapter 35, as amended; 49 CFR 1.49; and DOT Order 1351.29.

**Cem Hatipoglu,**  
*Associate Administrator, Vehicle Safety Research.*

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